REMARKS

Claims 87-95, and 100-118 are pending in the present Application. Of these claims, claims 87-95 and 109 were withdrawn from consideration. No claims have been canceled, and claims 100, 102, 104-106, 108, 110, and 111 have been amended, leaving claims 100-108 and 110-118 for consideration upon entry of the present Amendment.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Amendments and New Claims

No new matter has been introduced by these amendments.

Claim 102 has been amended to recite proper Markush language. The scope of the claim has not been narrowed thereby.

Claims 104-106 have been amended to clarify that the recited additive is present in the mixture used to form the extruded sheet. The scope of the claims has not been narrowed thereby.

Claims 108 and 110 have been amended to further claim the invention. Antecedent basis for the amendment is found at least at page 17, lines 3-5 of the specification as filed.

Claim Objections

Claim 110 stands objected to, based on the labeling of the steps. For consistency and clarity, the steps have been relabeled as (a) and (b). Removal of the objection is respectfully requested.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 100, 101, 108, and 110-112 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Rosen (US 5,423,160). Applicants respectfully traverse this rejection.

The Examiner states that "as set forth in the original disclosure (see page 17) thermoforming a polymeric sheet having mica as claimed intrinsically yields a product having

"a micronodular surface." (Office Action of 4/15/08, p. 3) The Examiner concludes that "when Rosen teaches thermoforming the same claimed material in the same claimed manner a micronodular surface is necessarily formed." (Office Action of 4/15/08, p. 3)

Applicants respectfully disagree, as the thermoforming methods set forth in the instant specification at page 17 and in Rosen are not the same, and therefore do not lead to the same results. Page 17 of the instant disclosure describes the process shown in Figure 2. As stated at lines 3-5, a heat softened sheet "may be vacuum formed by either procedure (A) or (B), both of which utilize only one mold". In other words, in method (A) only a male mold (24) is used, and in method (B), only a female mold (25) is used. Thermoforming is accomplished by using a vacuum to conform the sheet to the single mold. There is no disclosure at page 17 that the male and female molds (24) and (25) are used together. The micronodular surface is formed on the air side of the sheet, that is, the side that is not adjacent the mold. ("[T]he air side of the sheet corresponds to the food contact side. The food contact side undergoes a beneficial texturing effect as a result of the heat treatment . . . which causes a micronodular surface. . . ." (p. 17, lines 10-15))

Rosen, on the other hand, discloses a thermoforming process using two molds that fit matingly. According to Rosen, the web is "inserted in the space between the two movable working surfaces which are thereafter brought together into union with one another in such a manner that the interjacent web is enclosed between the working surfaces." (Col. 3, lines 16-20) A vacuum is applied, and the web is "sucked or drawn into the evacuated cavities into abutment against the walls of each respective mould cavity . . . ." (Col. 3, lines 21-25)

Claims 108 and 110 of the instant application have been amended to clarify that only one mold is used in the thermoforming process, and further that the only one mold contacts the first side of the sheet. The process of Rosen differs from the claimed process, in that two molds are used, and the web (sheet) is enclosed between the working surfaces of the molds. Rosenwood therefore cannot be said to inherently produce a micronodular surface as set forth in claims 108 and 110.

Rosen further does not explicitly or inherently disclose the specific processes set forth in dependent claims 100-101 and 111-112. Applicants therefore request reversal of the rejection of claims 100-101, 108, and 110-112 over Rosen.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 100-108 and 110-118 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Huang (US 5,439,628) in view of Mitsuno, *et al.* (EP 0 243 206) and either Watkins, *et al.* (US 5,514,315), or Kojimoto, *et al.* (US 4,248,651). Applicants respectfully traverse this rejection.

In making this rejection, the Examiner maintains that Huang teaches the basic claimed process to make a container wherein the container has a rough/coarse surface because of filler particles effusing from the surface (Office Action of 4/15/08, p. 4, citing Huang, col. 7, lines 35 to col. 8, line 5 and col. 6, lines 25-30). As noted by the Examiner, Huang further discloses the step of thermoforming the films or sheets to form containers (citing Huang at col. 8, lines 1-5). In response to the Applicants' prior arguments that the "rough and coarse" surface of Huang is disclosed with respect to the calendared sheet, and not the thermoformed article, the Examiner states that "the properties of the material are not expected to change substantially" upon thermoforming. (Office Action of 4/15/08, p. 9)

Applicants first note that there is no evidence that the "rough and coarse" surface disclosed by Huang is the same as the micronodular suface claimed by Applicants. Calendaring and thermoforming are very different processes, and would actually be expected to give rise to materials having different surface characteristics. As is known to those of ordinary skill in the art, surfaces can have greatly differing degrees of smoothness and roughness, and there is no reason to expect that calendaring and thermoforming would give rise to the same degree of roughness.

Applicants further respectfully disagree with the Examiner's contention that "the properties of the material are not expected to change substantially" upon thermoforming. One of ordinary skill in the art would, in fact, expect thermoforming to alter the nature of a calendared surface, because in thermoforming the articles is softened by heat – here at least

about 265°F. Once a material is softened, its surface characteristics can readily change, especially where the surface is in contact with a mold and under sufficient pressure to cause thermoforming. Irrespective of the nature of the surface produced when a sheet is calendared, one of ordinary skill in the art would have an expectation that the surface would change with thermoforming. There is nothing in Huang that teaches one of skill in the art to conduct thermoforming so that it gives rise to a micronodular surface.

Finally, Applicants see nothing in Huang that teaches one of ordinary skill in the art to use the sheets formed therein in a thermoforming process using only a single mold as set forth in the present claims.

Mitsuno is cited for specifically teaching a polypropylene/mica combination used in various molding applications, which allegedly "provides improved properties." (Office Action of 4/15/08, p. 4, citing Mitsuno at page 2, lines 48-51). According to the Examiner, one of ordinary skill in the art would have been motivated to use the mica of Mitsuno as a filler in the method disclosed by Huang "as suggested by Mitsuno, for the purpose of producing a desired product with improved physical properties."

Applicants respectfully disagree with the Examiner's alleged motivation to use the mica of Mitsuno as a filler in the method discloses by Huang. The passage cited by the Examiner in Mitsuno describes a particular *process* for the preparation of the compositions:

> *In the preparation for the filler-containing polypropylene composition* in accordance with the present invention, the components (a) to (d) may be melt-kneaded all at once, but in a preferred embodiment, the kneading is carried out in two separate steps. That is, the components (a), (b), and (d) are melt-mixed to prepare (e) a mixture in the first step. The mixture (e) is then melt-kneaded with the component (c) to obtain the resin composition of the present invention. *By this embodiment*, a good balance of physical properties of molded products can be further ensured.

(Mitsuno, p. 2, lines 45-50) This passage teaches to one of ordinary skill in the art that the disclosed preparation for the filler-containing polypropylene composition provides a good balance of physical properties. There is no reason for one of skill to take only the composition of Mitsuno, and expect that the improved balance of properties would be obtained in the absence of the process.

Watkins and Kojimoto are cited for their specific disclosure of thermoforming temperatures. (Office Action of 4/15/08, p. 4). Only Watkins discloses use of a single mold, e.g., at Figures 2-3. However, Watkins also teaches vacuum forming a coextruded polypropylene sheet in a female mold. (E.g., col. 1, lines 55-57). The purpose of using a single mold in vacuum forming the coextruded sheet is "so that the surface texture of the cap layer 13 as created during the coextrusion process maintains it integrity during the spa-forming process." (Emphasis added; col. 3, lines 39-42) Watkins further notes that "Forming on a male mold would place the pretextured surface of the polypropylene in direct contact with the mold surface, diluting, or erasing it." (Col. 3, lines 43-45)

Watkins thus teaches vacuum forming using a single (female) mold so as to maintain surface texture of an extruded sheet. The present claims, in contrast, use vacuum forming using a single mold so as to obtain a specific surface texture, micronodules. One of ordinary skill in the art would not use the compositions of Huang, Mitsuno, and Kujimoto in the process of Watkins, as this would result in losing the "integrity" of the surface of the cap layer as created during the coextrusion process of Watkins. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Claims 100-108 and 110-118 are accordingly not obvious over Huang in view of Mitsuno, and further in view of Kojimoto or Watkins.

Claims 102-107 and 113-118 are rejected under 35 U.S.C. § 103(a) as being obvious over Rosen (US 5,423,160) in view of Huang (US 5,439,628). Applicants respectfully traverse this rejection. As discussed in detail above, neither Rosen nor Huang disclose a thermoforming process using a single mold. Accordingly, the combination of Rosen and Huang do not render the claims obvious for the reasons set forth above.

Claims 100-103, 105-108, 110-114 and 116-118 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukui, *et al.* (US 5,100,930) in view of Simon (US 5,300,747) and Rosen.

Claims 104 and 115 are further rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukui in view of Simon and Rosen, further in view of "*Reinforcements (nonfibrous),*" Modern Plastics, July 1979.

None of Fukui, Simon, Rosen, or the Modern Plastics article discloses a thermoforming process using a single mold. Accordingly, the combination of Fukui, Simon, and Rosen do not render the claims obvious for the reasons set forth above.

Conclusion

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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